	Application No.	Applicant(s)
Notice of Allowability	09/692,350	RECIO ET AL.
	Examiner	Art Unit	
	MOHAMMAD A. SIDDIQI	2154	

*-- The **MAILING DATE** of this communication appears on the cover sheet with the correspondence address--*

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to _____.

2. ☒ The allowed claim(s) is/are *1,3-5,7-9,11-13,15 and 17-20*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some*   c) ☐ None   of the:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the
        International Bureau (PCT Rule 17.2(a)).

    * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.

    (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached

        1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.

    (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of
    Paper No./Mail Date _____.

    Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)

2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)

3. ☐ Information Disclosure Statements (PTO/SB/08),
    Paper No./Mail Date _____

4. ☐ Examiner's Comment Regarding Requirement for Deposit
    of Biological Material

5. ☐ Notice of Informal Patent Application

6. ☒ Interview Summary (PTO-413),
    Paper No./Mail Date _____ .

7. ☒ Examiner's Amendment/Comment

8. ☒ Examiner's Statement of Reasons for Allowance

9. ☐ Other _____.

/Nathan j. Flynn/
SPE 2154

DETAILED ACTION

1.   Claims 1, 3-5, 7-9, 11-13, 15, and 17-20 are allowed.

REASONS FOR ALLOWANCE

2.   The following is an examiner's statement of reasons for Allowance:

Examiner finds Applicant's arguments submitted in the Appeal Brief filed on 08/27/2007 and 11/20/2007 to be persuasive.

Regarding claim 1, none of the cited prior art references discloses or render obvious the claimed method for dynamically selecting a single one of the two subnet managers as a master subnet manager that controls the entire merged network of two subnets wherein selecting includes P_key entries of a GUID of second database of second subnet manager is the same as second P_key entry of a different GUID of first database and also changing all occurrences of said P_Key in said second database to a new P_Key value that is not one of said P_Key values within said first database and said second database. These features are enabled at least on pages 20-23 (fig 8 and 9B) of Applicant's specification.

Claims 3-5 and 7-8 depend from claim 1, and are thus allowed for the same reasons.

Claim 9 presents a computer program product of the same method as claim 1 and is thus allowed for the same reasons.

Claims 11-13 and 15 depend from claim 9, and are thus allowed for the same reasons.

Claim 17 presents a system area network the same method as claim 1 and is thus allowed for the same reasons.

Claims 18-20 depend from claim 17, and are thus allowed for the same reasons.

3.　Any comments considered necessary by applicant must be submitted no later than payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee Such submissions should be clearly labeled "Comments Statement of Reasons for Allowance."

EXAMINER'S AMENDMENT

4.　An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may

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be filed as provided by 37 CFR 1.312. To ensure consideration of such an

amendment, it MUST be submitted no later than the payment of the issue

fee.

Authorization for this examiner's amendment was given in a telephone

interview Mr. Eustace P. Isidore with on 02/08/2008.

5.   Please replace the claims as follows.

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IN THE CLAIMS:

1. (Currently amended) A method for efficiently merging subnets comprising the steps of:

linking a first subnet, having a first subnet manager and a first database utilized to control the entire first subnet, with a second subnet, having a second subnet manager and a second database utilized to control the entire second subnet, to create a merged subnet;

wherein said first and second database comprise configuration entries, each including time-stamped ~~a~~ partition key (P Key) and global unique identifier (GUID), which time-stamp indicates a time that said configuration entries are created and modified by respective ones of said first and second subnet managers; and

dynamically selecting and configuring one of said first subnet manager and said second subnet manger as a master subnet manager, which controls the entire merged subnet, wherein control of the entire merged subnet includes control of both said first subnet and said second subnet, wherein said dynamically selecting and configuring includes:

determining that a first P Key entry of a GUID of said second database of said second subnet manager is the same as a second P key entry of a different GUID of said first database; and

in response to said determining, changing all occurrences of said P Key in said second database to a new P Key value that is not one of said P Key values within said first database and said second database.

2. Canceled

3. (Currently Amended) The method of Claim [[2]] 1, wherein said first subnet manager is selected as said master subnet manager, said method further comprising the step of:

absorbing said subnet configuration entries from said database of the second subnet manager to said database of said master subnet manager to create a merged database of subnet configuration entries.

4. (Previously presented/original) The method of Claim 3, wherein said absorbing step further comprises the steps of:

determining that a first GUID entry of said second database is the same as a second GUID entry of said first database; and

in response to said determining step, selecting a most recent time-stamped GUID entry from among said first GUID entry and said second GUID entry as a representative GUID entry for said merged database.

5. (Previously presented) The method of Claim 4, further comprising the step of discarding a GUID entry not selected as said representative GUID entry.

6. Canceled

7. (Previously presented) The method of Claim 1, wherein said first and second subnets each comprises multiple nodes wired together to create a wired subnet that is controlled by a single subnet manager, and said selecting step provides a single master subnet manager, and further comprises de-activating the management function of the subnet manager not selected as the single master subnet manager.

8. (Previously presented) The method of Claim 3, further comprising the step of configuring said merged subnet utilizing said master subnet manager.

9. (Currently amended) A computer program product comprising:

a ~~computer readable medium~~ recordable type media; and

program instructions on said ~~computer readable medium~~ recordable type media that when executed by a processor performs the functions of~~for~~:

linking a first subnet, having a first subnet manager and a first database utilized to control the entire first subnet, with a second subnet, having a second subnet manager and a second database utilized to control the entire second subnet, to create a merged subnet;

wherein said first and second database comprise configuration entries each including time stamped partition key (P Key) and global unique identifier (GUID), which are time-stamped with a time said configuration entries are crated and modified by respective ones of said first and second subnet managers; and

dynamically selecting and configuring one of said first subnet manager and said second subnet manger as a master subnet manager, which controls the entire merged subnet, wherein control of the entire merged subnet includes control of both said first subnet and said second subnet, wherein said dynamically selecting and configuring includes:

determining that a first P Key entry of a GUID of said second database of said second subnet manager is the same as a second P key entry of a different GUID of said first database; and

in response to said determining, changing all occurrences of said P Key in said second database to a new P Key value that is not one of said P Key values within said first database and said second database.

10. Canceled

11. (Currently amended) The computer program product of Claim [[10]] 9, wherein said first subnet manager is selected as said master subnet manager, said program product further comprising program instructions for:

absorbing said subnet configuration entries from said database of the second subnet manager to said database of said master subnet manager to create a merged database of subnet configuration entries.

12. (Previously presented) The computer program product of Claim 11, wherein said absorbing instructions further comprises program instructions for:

determining that a first GUID entry of said second database is the same as a second GUID entry of said first database; and

in response to said determining step, selecting a most recent time-stamped GUID entry from among said first GUID entry and said second GUID entry as a representative GUID entry for said merged database and discarding an older time-stamped entry.

13. (Previously presented) The computer program product of Claim 12, further comprising program instructions for discarding a GUID entry not selected as said representative GUID entry.

14. Canceled

15. (Previously presented) The computer program product of Claim 9, wherein said first and second subnets each comprises multiple nodes wired

together to create a wired subnet that is controlled by a single subnet manager, and said program instructions for selecting provides a single master subnet manager, and further comprises program instructions for de-activating the management function of the subnet manager not selected as the single master subnet manager.

16.   Canceled

17. (Currently amended) A system area network comprising:

a processing component;

a memory:

a first subnet with a first subnet manager and a first database of subnet entries;

a second subnet with a second subnet manager and a second database of subnet entries, wherein said second subnet is communicatively coupled to said first subnet to form a merged subnet;

wherein said first and second database comprise configuration entries, each including time-stamped a partition key (P Key) and global unique identifier (GUID), which time-stamp indicates a time that said configuration entries are created and modified by respective ones of said first and second subnet managers;

logic components for selecting and configuring a master subnet manager from among said first subnet manager and said second subnet manager, wherein the master subnet manager controls the entire merged subnet, and wherein control of the entire merged subnet includes control of both said first subnet and said second subnet, wherein said logic components for dynamically selecting and configuring includes:

<u>logic for determining that a first P_Key entry of a GUID of said second database of said second subnet manager is the same as a second P_key entry of a different GUID of said first database; and</u>

<u>logic for, in response to said determining, changing all occurrences of said P_Key in said second database to a new P_Key value that is not one of said P_Key values within said first database and said second database</u>; and

software logic associated with said master subnet manager for merging said first database and said second database.

18. (Previously presented) The system of Claim 17, wherein:

said first subnet manager is said master subnet manager; and

said first subnet manager absorbs configuration entries from said second database into said first database to create a merged database, and control/management functions of said second subnet manager not selected as the master subnet manager are deactivated.

19. (Previously presented) The system of claim 18, wherein said first subnet manager controls and manages said system utilizing said merged database.

20. (Previously presented) The system of Claim 17, wherein said first subnet manager determines when a first GUID entry in said first database is the same as a second GUID entry in said second database and dynamically selects a most recent time-stamped entry from among both of said first and second GUID entries for inclusion in said merged database and discarding an older time-stamped entry.

6.   Please replace the paragraph [0001] and paragraph [0065] as follows:

AMENDMENTS IN THE SPECIFICATION

[0001] The present invention is related to the subject matter of the following commonly assigned, co-pending United States Patent Applications filed concurrently herewith: U.S. Patent No. 7,136,907 ~~Serial No. 09/692,342 Docket .No. AUS9-2000-0620)~~ entitled "Method and System for Informing An Operating System In A System Area Network When A New Device Is Connected"; Serial No. 09/692,347 ~~Docket No. AUS9-2000-0622)~~ entitled "Method and System For Scalably Selecting Unique Transaction Identifiers", now abandoned; U.S. Patent No. 6,748,559 ~~Serial No. 09/692,349 (Docket No. AUS9-2000-0623)~~ entitled "Method And System For Reliably Defining and Determining Timeout Values In Unreliable Datagrams"; and U.S. Patent No. 6,851,059 ~~Serial No. 09/692,353 (Docket No. AUS9-2000-0624)~~ entitled "Method and System For Choosing A Queue Protection Key That is Tamper-proof From An Application". The content of the above-referenced applications is incorporated herein by reference.

[0065] The present invention makes use of the features described in the subject matter of U.S. Patent No. 6,990,528 ~~Patent Application Serial No. 09/962,354 (Attorney Docket No AUS9-2000-0625US1)~~ "ASSOCIATION OF END-TO-END CONTEXT VIA RELIABLE DATAGRAM DOMAINS" filed on October 19, 2000, the entire content of which is hereby incorporated by reference.   The referenced application allows Reliable Datagram QPs to be used for communicating across multiple partitions. In SAN **113**, QPs that support SAN Service Types are associated with a partition and cannot communicate to QPs that are outside of the partition to which the QP is

associated. The QP is barred from communicating with QPs in another partition even if the node_s HCA port, which the QP uses, has access to different partitions. RD QPs, however, can communicate with any given partition the node_s HCA has access to, so long as there is an underlying End-End Context (EEC) which is associated with the given partition.

Conclusion

7.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

> U.S. Patent 6,941,350
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> U.S. Patent 7,010,607
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> U.S. Patent 6,697,360
>
> U.S. Patent 6,981,025

8.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to MOHAMMAD A. SIDDIQI whose telephone number is (571)272-3976. The examiner can normally be reached on Monday -Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nathan J. Flynn can be reached on (571) 272-1915.

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The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MAS

/Nathan J. Flynn/
Supervisory Patent Examiner, Art Unit 2826